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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,391	03/29/2004	Masao Utsunomiya	108421-00094	3072
7590	04/13/2006		EXAMINER	
AREN'T FOX KINTNER PLOTKIN & KAHN, PLLC Suite 400 1050 Connecticut Avenue, N.W. Washington, DC 20036-5339			PARSONS, THOMAS H	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/811,391	UTSUNOMIYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thomas H. Parsons	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 March 2004.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 March 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification while enabling in paragraphs [0004] and [0019] for surface treatment prior to coating is not enabling for coating with gold prior to surface treatment. Paragraph [0004] is directed toward nickel coating prior to coating with gold whereas paragraph [0010] is concerned with a passivation treatment prior to coating with gold.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by JP10-228914.

**Claim 1:** JP10-228914 in Figure 1 discloses a metallic separator (1) for a fuel cell (10, 11), comprising a stainless steel plate (1) having a surface, wherein gold (8) is coated on the surface at 2.3 to 94% of area rate (i.e. the gold is plated only on the square-wavy top portion of the separator) without surface treatment (i.e. the gold is coated directly onto the stainless steel plate). See abstract and paragraphs [0004]-[0008].

**Claim 5:** JP10-228914 in Figure 1 discloses production method for a metallic separator (1) for a fuel cell (10, 11), comprising a stainless steel plate (1) having a surface, the method comprising a step of coating gold on the surface in an acid bath without performing surface treatment (i.e. the gold is coated directly onto the stainless steel plate), wherein the gold is coated on the surface at 2.3 to 94% of area rate (i.e. the gold is plated only on the square-wavy top portion of the separator). See abstract and paragraphs [0004]-[0008].

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP10-228914 as applied to claim 1 above, and further in view of Underwood (2,133,996).

JP10-228914 is as applied, argued, and disclosed above, and incorporated herein.

**Claims 2 and 3:** JP10-228914 does not disclose that the amount of gold is not less than 0.019 mg/cm<sup>2</sup> (claim 2) and that the amount of gold is not more than 1.76 mg/cm<sup>2</sup> (claim 3).

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Underwood discloses in a similar problem solving area a stainless steel article coated with gold without surface treatment (i.e. the gold is coated directly onto the stainless steel plate) wherein the amount of gold is not less than  $0.019 \text{ mg/cm}^2$  (claim 2) and that the amount of gold is not more than  $1.76 \text{ mg/cm}^2$  (claim 3). See page 1, col. 2: 25-41.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the separator of JP '914 by incorporating the gold amounts of Underwood because both are concerned with gold plated stainless, and Underwood teaches a gold plated stainless steel article having the claimed amounts of gold that would have provided a high resistance to corrosion and acid thereby improving the overall life and performance of the separator.

**Claim 4:** The JP '914 combination does not disclose an average grain diameter of gold is 0.01 to 50  $\mu\text{m}$ . However, because the gold coated stainless steel separator of exhibits a small contact resistance similar to that instantly disclosed, the gold of the JP '9145 combination would obviously provide the claimed average grain diameter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons  
Examiner  
Art Unit 1745

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PATRICK JOSEPH RYAN  
SUPERVISORY PATENT EXAMINER